PART 1924 - CONSTRUCTION AND REPAIR

Subpart A - Planning and Performing Construction and other Development

§1924.1 Purpose.

This instruction supplements and adapts RD Instruction 1924-A to the development standards adopted and enforced by the State of Montana, Department of Labor and Industry, Building Standards Division, Building Codes Bureau, and the local building jurisdictions it certifies. (Revised 03-25-02, MPN 078)

§1924.5(d) Construction.

The following standards are adopted by USDA-Rural Development-Montana for the design, construction, modification, and repair of all applicable dwellings, structures, and related facilities: (Revised 10-25-02, MPN 085)

(1) Single Family Housing.

(i) Building Systems: *International Residential Code*, 2003 edition, chapters 1 through 10, published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illiniois 60478-5795, as amended by the Administrative Rules of Montana (ARM), section 24.301.154, and clarified by Exhibit E of this instruction. (Added 03-16-2006) Highlights of ARM 24.301.154 include: chapters 11 through 43 are deleted; design snow loads within state-certified building jurisdictions are determined by the local building official, and otherwise are based on "Snow Loads for Structural Design in Montana", authored by Videon and Schilke, Montana State University, August 1989; replaced or amended *IRC* subsections R301.6 *Roof Load*, R311.5.3 *Riser Height*, R311.5.3.2 *Tread Depth*, R311.5.4 *Landings for Stairways*, R312.1 *Guards required*, and R405.1 *Foundation Drainage, Concrete or masonry foundations*. (Revised 12-21-2004, MPN 099) Factory-built buildings, including manufactured homes, are subject to *IRC 2003* or *IBC 2003*, as amended by ARM 24.301.501, .511-.525, .532-.550, .557-.567, and .576-.577. Modifications, repairs, and additions to existing buildings are subject to requirements of applicable codes included in this Exhibit, or the *International Existing Building Code 2003* (available at ICC address noted above), as amended by ARM 24.301.171. (Added 12-21-2004, MPN 099)

(ii) Mechanical Systems: *International Mechanical Code*, 2003 edition, published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illiniois 60478-5795, as amended by the ARM, section 24.301.172. (Revised 12-21-2004, MPN 099)

(iii) Plumbing Systems: *Uniform Plumbing Code*, 2003 edition, published by the International Association of Plumbing and Mechanical Officials, 20001 South Walnut Drive, Walnut, California 91789, as amended by ARM, section 24.301.301 and .351; RD Instruction 1924-C, section 1924.107(a) (Revised 12-21-2004, MPN 099)

(iv) Electrical Systems: *NFPA 70*, also known as *National Electrical Code*, 2002 edition, published by the National Fire Protection Association, P.O. Box 9101, Quincy, MA 02269-9101, as amended by Administrative Rules of Montana, section 24.301.401 and .411. (Revised 12-21-2004, MPN 099)

(v) Thermal Systems: *International Energy Conservation Code*, 2003 edition, published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illiniois 60478-5795, as modified and amended by ARM 24.301.161, and as clarified in Exhibit A, this MT Instruction. New Manufactured Homes shall meet HUD Thermal Zone 3 criteria. Repairs, renovation of existing residences are subject to *Thermal Performance Construction Standards*, RD Instruction 1924-A, Exhibit D. (Revised 12-21-2004, MPN 099)

(2) Multiple Family Housing, Community Facilities, and other commercial structures*.

(i) Building Systems: *International Building Code*, 2003 edition, together with Appendix C, published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illiniois 60478-5795, as modified and amended by ARM 24.301.131, -.134, -.138-.139, -.142, and -.146. One notable technical amendment of ARM 24.301.142 is the establishment of the minimum footing depth for buildings located outside of certified local building jurisdictions, which is 36 inches for single-story wood or metal frame buildings, and 48 inches for multi-story or masonry buildings. (Revised 12-21-2004, MPN 099)

(ii) Mechanical Systems: *International Mechanical Code*, 2003 edition; see (1) (ii) above for further information. (Revised 12-21-2004, MPN 099)

(iii) Plumbing Systems: *Uniform Plumbing Code*, 2003 edition; see (1) (iii) above for further information. (Revised 12-21-2004, MPN 099)

(iv) Electrical Systems: *NFPA 70*, aka *National Electrical Code*, 2002 edition; see (1) (iv) above for further information. (Revised 12-21-2004, MPN 099)

(v) Thermal Systems: *International Energy Conservation Code*, 2003 edition; see (1) (iv) above for further information. (Revised 12-21-2004, MPN 099)

(vi) Accessibility Standards: *IBC*, 2003 edition, as amended by ARM 24.301.901-.904, and other applicable accessibility standards. *There is no single uniform accessibility standard due to varying applicabililty imposed by federal and state legislation.* Requirements of *Uniform Federal Accessibility Standard* (UFAS), HUD *Fair Housing Accessibility Guidelines* (HUD/AG), and *American with Disabilities Act Accessibility Guidelines* (ADA/AG) are applicable according to building function, type of ownership and availability to use by the public, site design, and other factors. (Revised 12-21-2004, MPN 099)

*Hospitals and other Medical Facilities: *Guidelines for Construction and Equipment of Hospitals and Medical Facilities*, 1993 edition, published by The American Institute of Architects Press, 1735 New York Ave., N.W., Washington, D.C. 20006; *NFPA 101: Life Safety Code*, 2006 edition, published by National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269

§1924.5(f)(1) Responsibility of the applicant.

Planning construction and obtaining technical services with regard to drawings, specifications, certifications of compliance, and cost estimates are the sole responsibility of

the applicant, for their benefit of contracting, obtaining building permits and plan approval by Rural Development. Assistance from the loan approval official, and technical staff may be necessary to assure the development is properly planned to protect Rural Development's security interest. (Revised 09-09-96, MPN 045)

(i)(A) All applicants for new single-family dwelling housing loans must submit drawings and specifications certified as meeting the development standards. Certification of building plans for single-family housing may be accepted from authorized building officials. Form RD 1924-25 must be used for this certification. Exhibit D of this subpart, *Certified Plan Reviewers in Montana*, lists cities that are recognized by the Building Codes Bureau (of the Building Standards Division, Montana Department of Labor and Industry) as local jurisdictions for building code permits and enforcement, and can be used by applicants as guidance to locally qualified plan certifiers. Exhibit D also identifies certified jurisdictions where the State Director has determined qualified to review and assure home designs comply with the development standards. Loan officials may accept a building permit issued in these select jurisdictions as adequate evidence of acceptable plans, in place of the Plan Certification form. (Revised 10-25-02, MPN 085)

(i)(B) When construction of a new dwelling includes a crawl space design, the applicant must provide RD with plans, specifications or construction notes that are part of their legal contract documents with the Contractor, that clearly identifies the method of crawl space ventilation. Upon submittal of plans for new dwelling construction, the RD loan official shall determine whether the design utilizes mechanical ventilation of the crawl space area instead of natural ventilation, or forward these to the State Architect or other designated plan review, for that determination. In any case where such a design is proposed, the contract documents must specify responsibilities of the Contractor to be implemented during construction that provide for the temporary ventilation of the enclosed crawl space area adequate to prevent the growth of mold on the surfaces of the building construction. Exhibit E of this subpart further illustrates the building code requirements, and minimum contract document requirements. (Added 03-16-2006, MPN 111)

(ii)(A) When construction of a new dwelling includes development of an onsite sewage disposal system, or onsite water supply well, prior to loan approval, the applicant must provide RD with a copy of plans, permit, and other documentation as submitted to and approved by the state or local health authority, such as a county sanitarian, environmental, health, or planning officer responsible for development of wells and sewage disposal systems. Other documentation should include soil percolation test, engineering report on groundwater level, and any other documentation required by the health authority. As a followup, the borrower shall provide RD with a copy of the local health authority final inspection/acceptance document. For any new private, individual or shared well, the applicant/borrower must have a water sample tested for bacteria by a certified laboratory, and provide RD a copy of laboratory test results indicating compliance with State water quality standards. Well drilling construction contracts between the applicant and a contractor shall be made on an Agreement and Agency approval of well drilling agreements is required when loan funds are used for that purpose. (Revised 3-16-06, MPN 111)

(ii)(B) When a new manufactured home is to be purchased, the dealer-contractor responsible for the sale, transportation and setup of the unit must provide the information and sign the certification statement on *Form MT 1924-1, Dealer-Contractor Certification Statement for New Manufactured Housing*. Contractors responsible for the construction of the foundation or basement of a manufactured home and various site improvements shall comply with Rural Development development policies. *Exhibit C, Development Guidelines for New Manufactured Housing*, is provided for use by loan applicants, lenders, dealers, and contractors as a guideline for compliance. When an applicant proposes to contract for foundation or basement for a new manufactured home from other than the Dealer-Contractor responsible for the sale of the home, they must submit to the RD Loan Official a contract, typically on Form RD 1924-6, that assures the foundation contractor will be responsible the foundation work will provide adequate support for the manufactured unit in compliance with RD development standards. The contract must include reference to drawings certified in accordance with this section. RD acceptance of any proposal will be determined by the RD Loan Official. (Added 10-25-02, MPN 085)

(iii)(A) When a loan application involves the purchase of an existing dwelling, the applicant, or the seller of the dwelling, must provide RD with qualified certifications concerning the adequacy of the electrical, plumbing, heat, and any onsite water supply or sewage disposal systems prior to the approval of the loan. When a HUD-certified Real Estate Appraiser is contracted for valuation services, their summary appraisal report must include the Valuation Conditions Form, *Notice to Lender*, that identifies observed conditions and recommended repairs. Form HUD-92564-VC (8/99), which is Part 2 of HUD's Comprehensive Valuation Package, may be considered fulfillment of the requirements of this section. VC conditions 2 or 4 (VC-2, VC-4) are marked "yes" with notation of the appraiser's observation when the appraiser is concerned about the onsite well or sewage disposal system. Where a central water supply or sewage collection system is available near the existing dwelling, the applicant shall provide RD a cost estimate for connection to the central system. When a connection to a central system is feasible (no more than 3% of the value of the home), such connection shall be a condition of the purchase of the dwelling. The RD Loan Official will determine if further inspection and certification of adequacy shall be required for any component of a property improvement. When further inspection and certification of adequacy is required, it can be made by any qualified individual based upon their physical inspection of the dwelling. Form MT 1924-12, *Inspection Certification For Existing Dwelling*, may be completed and submitted for this purpose. Attachment 1 to this form is provided as a reference to the minimum conditions and features of an acceptable dwelling. (Revised 10-25-02, MPN 085)

(iii)(B) When a loan application involves the purchase or repair of an existing dwelling with an onsite well as the water supply, the applicant or the seller shall have a water sample taken at the tap, and tested for bacteria by a certified laboratory. Laboratory results indicating compliance with local water quality standards shall be provided to the RD Loan Official. (Added 10-25-02, MPN 085)

(iii)(C) When a loan application involves the purchase or repair of an existing dwelling and inspection indicates improvements have construction with extensive wood to ground contact, then RD shall inform and require of the applicant a building inspection by a qualified pest control inspection service, and reported on the industry's Form NPCA-1,

also included in Exhibit B to this Instruction. When treatment is applied to an existing home, the appropriate forms are to be provided to RD or the Lender. (Added 03-25-02, MPN 078)

§1924.5(f)(2) Responsibility of the RD Loan Official. (Revised 10-25-02, MPN 085)

(i) Advising Applicants. The RD Loan Official will advise applicants of RD construction requirements, and provide the necessary forms the applicant is responsible to complete. (Renumbered 3-16-06, MPN 111)

(A) For new construction, the loan official will advise the applicant of the development standards adopted by Rural Development-Montana, the certification requirements for plans, specifications, and private individual water/sewer systems. The RD Loan Official will provide the required forms for completion. Exhibit F, *Checklist for New DwellingDesigns*, is used for loan processing to obtain information for review and acceptance of plans and specifications. The checklist will be placed on top in position 5 of the applicant's file. (Revised 10-25-02, MPN 085)

(B) For existing homes, the RD Loan Official will visit the property to conduct a preliminary evaluation. This is consistent with RD Handbook-1-3550, paragraph 5.1 B(1). That Handbook provides as a guide Attachment 5A, *Checklist for Initial Assessment of Existing Housing*. In addition to that guidance, the Loan Approval Offical may use Attachment 1 to Form MT 1924-12, *Inspection Guide For Existing Dwellings*. This is a detailed guide to the minimum conditions and features of suitable housing. (Revised 03-25-02, MPN 078)

(C) For existing homes considered for Section 502 loan purposes, the RD Loan Official shall determine the dwelling is not a factory-built manufactured home, which is ineligible for a Section 502 loan. A Section 504 repair loan or grant application may consider repairs to an existing manufactured homes only if the dwelling has a permanent foundation or repairs include installation of a permanent foundation. Exhibit C of this MT Instruction provides guidance in the construction requirements for a permanent foundation, and the State Architect can be consulted for assistance. Factory-built modular homes are eligible for Section 502 loan applications. When appropriate the RD Loan Official shall determine whether a factory-built home is manufactured or modular by inspecting the dwelling for a metal insignia plate. A manufactured home insignia will have the following language: "AS EVIDENCED BY THIS LABEL NO. ---- THE MANUFACTURER CERTIFIES TO THE BEST OF THE MANUFACTURER'S KNOWLEDGE AND BELIEF THAT THIS MANUFACTURED HOME HAS BEEN INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOUSING AND URBAN DEVELOPMENT AND IS CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE." A modular home insignia will have the following language: "THIS INSIGNIA IS THE PROPERTY OF THE STATE OF MONTANA DEPARTMENT OF COMMERCE BUILDING CODES BUREAU. THIS MANUFACTURER CERTIFIES THAT THIS UNIT IS CONSTRUCTED IN ACCORDANCE WITH APPLICABLE MONTANA STATUTES COVERING PLUMBING, HEATING, ELECTRICAL, AND STRUCTURAL IN FACTORY BUILT BUILDINGS. ANY ALTERATION, CONVERSION OR DEVIATION FROM APPROVED PLANS VOIDS THIS "INSIGNIA OF APPROVAL"." When no insignia is found, the RD Loan Official should inspect the floor system of the dwelling. A manufactured home will have at least 2 steel beams supporting floor joists, running the length of the dwelling, inward from the exterior walls, but not along the centerline of the dwelling. A modular home's structural support will be located beneath the exterior wall and possibly at the centerline, but not as described for the manufactured home. The State Architect can be consulted for further assistance in determining the construction of the dwelling. (Added 10-25-02, MPN 085)

Attachments

Exhibit A: Montana Thermal Performance Standards
Exhibit B: Wood Destroying Insect Infestation Inspection Report
Exhibit C: Development Guidelines for New Manufactured Housing
Exhibit D: Certified Building Jurisdictions in Montana
Exhibit E: Ventilation of Residential Crawl Space Areas During Construction
Exhibit F: Checklist for New Dwelling Designs

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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Development

MONTANA THERMAL PERFORMANCE STANDARDS

I. PURPOSE: This exhibit clarifies implementation of USDA Rural Development's *Thermal Performance Construction Standards*, Exhibit D to RD Instruction 1924-A, and State Building Code requirements for various USDA RD loan and grant programs administered in Montana. *Montana Thermal Performance Standards* incorporates energy conservation provisions of adopted development standards specified in MT Instruction 1924.5(d) of this subpart.

II. POLICY:

- Energy conservation design requirements for new, single- and two-family residential dwellings, including modular and panelized homes, and for additions to existing dwellings, are described in part III A of this Exhibit and include compliance with the energy conservation standard and amendments adopted by the State of Montana.
- Design requirements for new manufactured housing, but not including modular homes, are described in part III B of this Exhibit and include compliance with the HUD thermal standard.
- Design requirements for new multiple-family housing and townhouses are described in part III C of this Exhibit and include compliance with the energy conservation standard and amendments adopted by the State of Montana.
- Minimum physical conditions for existing, single-family residential dwellings, to be financed with RD loan or grant funding, are described in part III D of this Exhibit. The loan official shall require the dwelling to be inspected by a qualified inspector to report observed conditions. Certification of observed conditions may be completed on Form MT 1924-12.
- Minimum documentation requirements included in this Exhibit, *Montana Thermal Performance Standards,* the Montana Building Codes, and other building standards specified in MT Instruction 1924.5(d) shall supercede all loan processing checklists that may not specify documentation for energy conservation. (Revised 12-21-2004)

III. MINIMUM REQUIREMENTS:

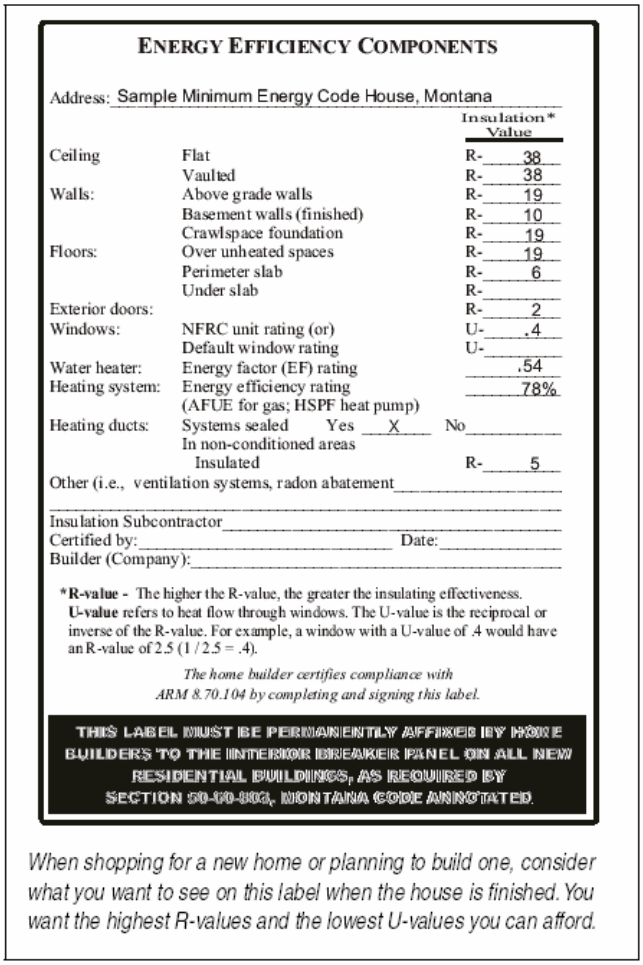
A. <u>Single-family housing (except manufactured housing), new construction.</u> Compliance for new detached single- and two-family dwellings (Group R-1) shall be demonstrated by building design (i.e. plans, specifications and energy load calculations) meeting the current requirements of Chapter 301, Montana Building Codes, which references the International Energy Conservation Code (IEEC), 2003 edition, as amended and adopted by Administrative Rules of Montana, Rule 24.301.161. Energy requirements for detached factory-built manufactured housing are provided in section III B of this Exhibit. The following highlights documentation requirements. (Revised 12-21-2004)

1. **Plan certification.** Final acceptance of a proposed design by the loan official is based in part upon certification of the building's thermal performance plans, specifications and thermal calculations, as required in RD Instruction 1924.5(f)(1)(iii) of subpart A.

III A Single-family housing (except manufactured housing), new construction (continued)

It shall be the responsibility of the homebuyer to obtain and submit to the loan official a completed *Plan Certification*, Form RD 1924-25, available at any Rural Development office, certified by a qualified plan reviewer. The plan certification form must identify the energy standard as "2003 IECC, Chapter 5" (or Chapter 4 or Chapter 6 if these are used), or "2003 IRC, Chapter 11", whichever is used by the building designer or contractor. Exception: Evidence of an approved building permit and a corresponding inspection report issued by the State-certified, local Building Authority prior to covering the insulation *may* be accepted by the loan official as documentation in lieu of the completed *Plan Certification* form.

2. **Home energy label.** In addition to plan certification documentation requirement described in III A 1 of this Exhibit, an energy labeling requirement of the Montana building code applies to new residential construction financed by RD. The building contractor shall be responsible to provide the homebuyer a self-certification of the residential energy efficiency by affixing an energy labeling sticker to the residence in accordance with Montana Building Code rule 24.301.162. Self-certification and energy labeling does not satisfy the plan certification requirement in III A 1 of this Exhibit. The sticker must be affixed to the inside of the electrical panel door.



ENERGY EFFICIENCY COMPONENTS

Address: Sample Minimum Energy Code House, Montana

		Insulation* Value
Ceiling	Flat	R- 38
	Vaulted	R- 38
Walls:	Above grade walls	R- 19
	Basement walls (finished)	R- 10
	Crawlspace foundation	R- 19
Floors:	Over unheated spaces	R- 19
	Perimeter slab	R- 6
	Under slab	R-
Exterior doors:		R- 2
Windows:	NFRC unit rating (or)	U- .4
	Default window rating	U-
Water heater:	Energy factor (EF) rating	.54
Heating system:	Energy efficiency rating (AFUE for gas; HSPF heat pump)	78%
Heating ducts:	Systems sealed Yes X No	
	In non-conditioned areas Insulated	R- 5

Other (i.e., ventilation systems, radon abatement

Insulation Subcontractor

Certified by: Date:

Builder (Company):

***R-value** - The higher the R-value, the greater the insulating effectiveness. **U-value** refers to heat flow through windows. The U-value is the reciprocal or inverse of the R-value. For example, a window with a U-value of .4 would have an R-value of 2.5 (1 / 2.5 = .4).

The home builder certifies compliance with ARM 8.70.104 by completing and signing this label.

THIS LABEL MUST BE PERMANENTLY AFFIXED BY HOME BUILDERS TO THE INTERIOR BREAKER PANEL ON ALL NEW RESIDENTIAL BUILDINGS, AS REQUIRED BY SECTION 50-60-203, MONTANA CODE ANNOTATED.

When shopping for a new home or planning to build one, consider what you want to see on this label when the house is finished. You want the highest R-values and the lowest U-values you can afford.

Figure 1. Montana's home energy label. Required minimum R-values and maximum U-factors may vary from those shown in this sample, depending on location of the home and the design establishing a ratio of glazing area to wall area.

3. Prescriptive thermal requirements. Chapter 6, section 602 of the 2003 IECC, and Chapter 11 of the 2003 International Residential Code (IRC) provide simplified prescriptive thermal requirements for single-family housing building envelope components, and compliance can be demonstrated without calculations. Other designs with envelope components of various levels of thermal performance shall meet the minimum requirements provided in Chapters 4 and 5 of the 2003 IECC. However, compliance with these requirements must be demonstrated with additional mathematical calculations provided by the home designer, building subcontractor, architect, or engineer. The base path for compliance with prescriptive thermal charactictics require:

- the **window area** of a detached single-family dwelling does not exceed **15%** as a ratio of net glazing area to the gross exterior wall area; and
- Maximum **glazing U-factor** of **.35**, as certified with a NFRC label;
- Minimum **ceiling insulation** R-value of **R-49**, or if roof construction allows the full insulation depth over the entire ceiling area, including the exterior wall frame (see figure 2), then **R-38** can be used;
- Minimum above-ground exterior **wall insulation** R-value of **R-21**; and,
- Minimum **floor insulation** R-value of **R-21** over unheated spaces;
- Minimum **foundation wall insulation** R-value of **R-20** for crawlspace walls (and rim joist area) when design is for heated crawl space and without floor insulation;
- Minimum **finished and heated basement wall insulation** R-value of **R-11** for climate zone 15, and **R-18** for climate zone 16, if basement design is heated and finished. See figure 3 for Montana climate zones. Montana rule 24.301.161 amends section 502 (and 602) of the 2003 IECC for **unfinished / unheated basement wall insulation** to allow no additional insulation.
- Minimum **slab perimeter insulation** (4 foot depth) R-value of **R-13** for climate zone 15, and **R-14** for climate zone 16.

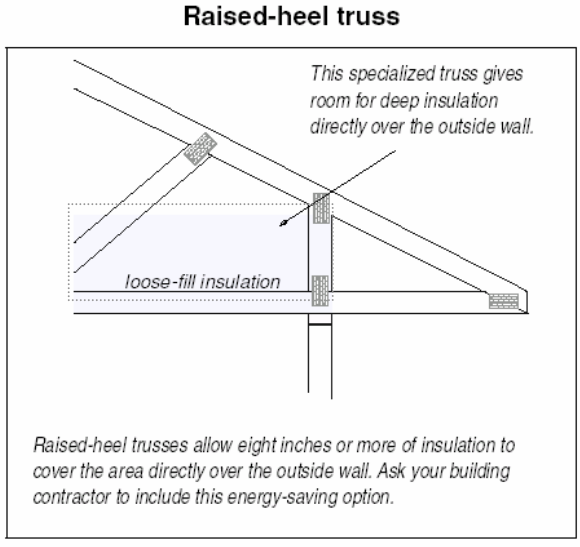


Figure 2. Section of a raised heel roof truss.

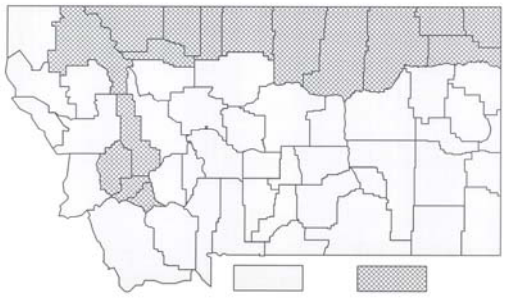


Figure 3. Montana climate zones by county.

III A Single-family housing (except manufactured housing), new construction (continued)

4. **Energy conservation construction requirements.** The following outlines some requirements of Chapters 5 and 6, 2003 IECC, and Chapter 11, 2003 IRC.
    - **Penetrations** in the building envelope surrounding all conditioned spaces (such as caused by recessed electrical junction boxes and light fixtures, the edges of tubs and showers, at attic and crawl space panels, between window and door frames and exterior walls, and between exterior wall sheathing joints and seams) that are sources of air leakage, shall be sealed with durable caulking materials, closed with gasketing systems, taped or covered with permeable housewrap, or otherwise sealed to limit uncontrolled air movement.
    - **Duct system joints**, longitudinal and transverse joints, seams, and connections of supply and return ducts, shall be made substantially airtight by means of tapes, mastics, gasketing and other approved closure systems. Tapes and mastics used to seal ductwork shall be listed and labeled in accordance with UL 181 A or B; unlisted duct tape is not permitted as a sealant on any metal ducts.
    - **Duct insulation** and all portions of a forced-air distribution system shall be a insulated to a minimum R-value of R-5 when located within the building and outside the conditioned space, and R-8 when located outside the building. Pipe insulation of an automatic-circulating hot water system shall be at least ½-inch and up to 1-inches thick for piping (up to 1-inch diameter size) located outside the conditioned spaces of the building.
    - **Shower heads** shall have a maximum flow rate of 2.5 gpm (at 80 psi).

B. **Manufactured single-family housing, new construction.** Compliance with energy conservation requirements for a factory-built manufactured housing installed on a permanent foundation shall be the same as required for site-built single-family, as described in section III A of this Exhibit, except as follows: (Revised 12-21-2004)

1. **Certification statement.** It shall be the responsibility of the homebuyer of a new manufactured home to obtain and submit to the loan official a completed Form MT 1924-1, *Dealer-Contractor Certification Statement for New Manufactured Housing,* available at any Rural Development office, completed and signed by an RD-approved Dealer-Contractor. This form replaces only the thermal design certification provided with RD 1924-25, which is otherwise required for structural compliance of the manufactured home's permanent foundation. The Dealer-Contractor certifies the construction of the manufactured home complies with HUD Title II thermal standard for Montana, which is Uo-value zone 3. Actual compliance and certification of manufactured homes are determined through an independent inspection service conducted at the factory.
2. **Energy label.** In addition to any energy label required by Montana Building Code**,** each manufactured home shall be provided with an energy label. The manufacturer must provide a certification label, typically found in the unit's electrical panel, to show the level of performance required for Montana, which is Uo-value zone 3.
3. **Prescriptive thermal requirements.** Prescriptive standards do not apply to the building envelope components of manufactured housing. Thermal performance of the overall building shall be demonstrated by the manufacturer of the building.

4. **Energy conservation construction requirements.** Any portion of an air-distributution system installed on the building site within the crawl space or other unconditioned space shall comply with the same requirements for site-built single family housing, as described in section III A of this Exhibit, including the duct insulation and duct sealing requirements.

C. **Multiple-family housing, assisted living residences, and townhouses, new construction.** Compliance for new multiple-family dwellings (Group R-2), assisted living residences (Group R-4), and townhouses, three stories and under, shall be demonstrated by building design (i.e. plans, specifications and energy load calculations) meeting the current requirements of Chapter 301, Montana Building Codes, which references the International Energy Conservation Code (IECC), 2003 edition, as amended and adopted by Administrative Rules of Montana, Rule 24.301.161. For Group R-2, R-4, and townhouse buildings four or more stories in height, refer to section III E of this Exhibit for requirements. Energy requirements for Multi-family housing designs shall be met the same as required for site-built single-family, as described in section III A of this Exhibit, including (1) plan certification, (2) energy label, (3) prescriptive thermal requirements, and (4) energy conservation construction requirements, except as follows: (Revised 12-21-2004)

1. **Plan certification:** A building permit issued by a Montana-certified local building authority *may not* be accepted by the loan official as documentation in lieu of the completed *Plan Certification* form.
2. **Prescriptive thermal requirements:** Compliance with IECC shall be demonstrated by either (a) meeting the requirements of Chapter 6 for buildings with a glazing area that does not exceed **25%** of the gross area of exterior walls (section III A 3 of this Exhibit summarizes Chapter 6 prescriptive energy requirements for building envelope components); or (b) meeting the requirements of Chapter 4, or Chapter 5 for Group R-2, R-4, or townhouse residential buildings.

D. **Existing single-family housing.** Existing single family housing, including site-built homes and factory-built modular homes, except existing manufactured homes found ineligible for RD housing program financing, shall meet the following:

- comply with prescriptive thermal requirements of Exhibit D, RD Instruction 1924-A;
- be evaluated by a qualified inspector in order to report the thermal characteristics of the dwelling; a written inspection report is the required form of documentation.

1. **Prescriptive thermal requirements:** The loan official shall determine compliance with the following prescriptive requirements from Exhibit D, RD Instruction 1924-A:
   - Ceiling/Roof Assembly: Maximum U-value: 0.026; or, minimum R-value: R-38.
   - Exterior Wall Assembly: Insulate as near to the following standard as economically feasible. Exterior wall framing exposed during any repair or rehabilitation work shall have a vapor barrier installed, and be fully insulated to an R-value of R-20.
   - Glazing: Maximum U-value: 0.69; or, minimum R-value: R-1.45. Existing double (insulated) glass, or single pane with a storm window, may be accepted. A storm window shall be provided at single pane glazing.

- Door: 1 3/4-inch thick metal-faced door system, with rigid insulation core, and durable weather-stripping, allowing air infiltration at a rate no more than 0.50 cfm per foot of door edge; or, 1 3/4-inch thick solid wood door, with separate storm door, and durable weather-stripping.

E. **Commercial buildings, new construction.** The Administrative Rules of Montana (Title 24, Chapter 301.160) require that commercial buildings and residential structures over 3 stories must comply with the 2003 IECC **or** ASHRAE/IESNA Standard 90.1-2001. Both, the 2003 IECC and ASHRAE/IESNA 90.1-2001 regulate envelope requirements, lighting, mechanical, and service water heating equipment. If the latter standard is used for compliance, it must be used for compliance with all requirements of that section (envelope, lighting, mechanical, and service water heating design). For example, using parts of 2003 IECC for lighting and parts of ASHRAE for lighting compliance is not allowed. 2003 IECC does not apply to buildings or portions of buildings intended primarily for manufacturing or industrial processing or buildings (and portions of buildings) that are not heated. Alterations to existing conditioned spaces must comply with 2003 IECC requirements; unchanged portions do not have to comply. Residential buildings three stories or less above grade are covered under the residential section and documentation requirements are highlighted in section III A-D of this Exhibit. (Added 12-21-2004)

1. **Building design.** New commercial buildings may require designs prepared under the supervision of a Montana registered architect or engineer in accordance with the Montana Building Code and with RD Community Facilities program design policies as set forth in RD Instruction 1942-A, or 1942-F. Use of *Plan Certification*, on Form RD 1924-25 is not applicable with most commercial buildings. In most developments involving construction of commercial buildings, RD will require submission of complete architectural, engineering, and structural drawings, specifications, and as needed, thermal calculations to the loan official for Agency review and approval.
2. **Prescriptive thermal requirements.**
   - Building envelope energy requirements set forth in Chapter 8 of 2003 IECC provide a prescriptive design compliance path for commercial buildings. Refer to Tables 802.2(33) and 802.2(34) for thermal requirements that vary according to the building design's ratio of net glazing area to gross wall area. Joints and penetrations of the building envelope must be sealed to control air infiltration in accordance with 2003 IECC, section 802. Mechanical system, service water heating system, and lighting system requirements are set forth in sections 803, 804, and 805, respectively. Designs for commercial buildings otherwise exempt from envelope energy and mechanical system requirements must comply with provisions for service water heating and lighting systems (see section 101.2.1 for exceptions).
   - Compliance shall be documented by architectural or engineering notes and calculations submitted with the design documents.

Wood Destroying Insect Infestation Inspection Report

This is not a structural damage report. This form may not be altered.

Section I. General Information

Inspection Company, Address, & Phone:

Company's Business Lic. No:

FHA/VA Case No. (if any):

Property Address:

Inspector's Name:

Structure(s) Inspected:

Section II. Inspection Findings This report is indicative of the condition of the subject structure(s) ***on the date of the inspection only*** and is ***Not*** to be construed as an express or implied warranty or guarantee against latent, concealed, or future infestation or defects. Any such warranty or service agreement to provide future treatment or inspections may be provided as a separate attachment and only if indicated in Section IV. ***See Section IX on side 2 for important information.*** Based on a careful visual inspection of the readily accessible areas of the structure(s) inspected:

☐ a. **No visible** evidence of a wood destroying insect infestation was observed.

☐ b. **Visible** evidence of a wood destroying insect infestation was observed as follows:

☐ Live insects; (description & location): _____

☐ Insect parts, frass, exit holes, or shelter tubes; (description & location): _____

☐ Damage from wood destroying insects was noted in the following area(s): _____

Regarding visible evidence of wood destroying insects: The inspector may find wood which has been damaged by insects. Any damage noted should be considered only as evidence of current or previous infestation of wood destroying insects. If box b is checked above, ***it should be understood that some degree of damage, including hidden damage, may be present.*** The inspector's training and experience do not qualify the inspector in damage evaluation or any other building construction technology and/or repair. **Upon receipt of this report,** the Seller or the Seller's Agent shall notify the Buyer that any damage should be examined by a qualified individual to determine the need for repair.

Any visible evidence observed above appears :

☐ **Active**; treatment recommended at this time (Note: FHA and VA require treatment for all active infestations)

☐ **Inactive**; no treatment recommended at this time

☐ **Activity and need for treatment cannot be determined without further investigation.** Reason: _____

In many cases, based upon visible signs of infestation by wood destroying insects, it is not possible without benefit of subsequent inspections and evaluations over a period of time to ascertain whether an infestation is active or inactive. If a warranty or service agreement is in effect, the company which issued the warranty or service agreement should be contacted. If no warranty or service agreement is in effect, the inspecting company or another company may provide treatment, if requested and permitted by regulations, for an additional fee.

☐ It appears that the structure(s) or a portion thereof may have been previously treated. Evidence of previous treatment: _____

This company can give no assurances with regard to work that may have been previously performed by other companies. The company which treated the property should be contacted by the Buyer for treatment and warranty information.

Section III. Treatment was/is scheduled to be performed by the inspecting company: ☐ Yes ☐ No Date:

Treatment Description:

Section IV. Attachments The following listed attachments are integral parts of this inspection report:

Section V. Obstructions & Inaccessible Areas

The following areas of the structure(s) inspected were obstructed or inaccessible (see item 4 on side 2):

___ Basement _____
___ Crawl Space _____
___ Main Level _____
___ Attic _____
___ Garage _____
___ Exterior _____
___ Porch _____
___ Addition _____
___ Other _____

The inspector may write out inaccessible areas or use the following key:

1. fixed ceilings	12. only visual access
2. suspended ceiling	13. no access beneath
3. fixed wall covering	14. cluttered condition
4. floor covering	15. standing water
5. insulation	16. dense vegetation
6. cabinets or shelving	17. exterior coverings
7. stored items	18. window well covers
8. furnishings	19. wood pile
9. appliances	20. snow
10. no access or entry	21. unsafe conditions
11. limited access	

Section VI. Additional Comments (may be continued on side 2)

Section VII. Inspector's Signature: Neither I nor the company for which I am acting have had, presently have, or contemplate having any interest in the property.

Certification or Registration No: (if applicable)

Date of Inspection:

X

Section VIII. Statement of Buyer & Seller This report is integral to, and a necessary part of the inspecting company's full disclosure as to the scope and inherent limitations of the inspection and report of findings. It is most important that the interested parties acknowledge this advice. The Seller hereto agrees that all known property history information regarding WDI infestation, damage from infestation, and treatment history has been disclosed to the Buyer.

Signature of ☐ Seller(s) ☐ Owner(s) (if refinancing) X

Date:

The undersigned hereby acknowledges receipt of a copy of this report

Buyer's Signature:

Date:

X

This report must be signed by the Buyer and Seller as applicable. A legible copy of this signature page must be returned to the inspecting company by the person ordering this inspection. **See section IX on side 2 regarding the scope & limitations of the inspection & this report.**

Forms VA 26-8850 and HUD-92053 are obsolete after 9/30/95. Submit an Original and two copies. Side 1 form NPCA-1 (6/95)

DEVELOPMENT GUIDELINES FOR NEW MANUFACTURED HOUSING

I. PURPOSE: This exhibit is a guide for identifying required contract documents needed by the Loan Official (USDA-Rural Development or Guaranteed Rural Housing Approved Lender) before any site development work related to the installation of a new manufactured housing unit(s) is authorized to begin.

II. POLICY: The Loan Official shall be responsible to determine whether the seller of a manufactured home is an RD approved Dealer-Contractor (the approved list is available in any RD office). The Dealer-Contractor shall be responsible to provide the Loan Applicant complete development and contractor service, unless RD has determined the loan applicant is qualified to contract directly with a foundation contractor, or well and septic contractors. The Dealer-Contractor may subcontract the footings and foundation, but will be responsible for this and any other site development work included in their contract. Any variance from this policy will be subject to final determination by the RD Community Development Manager.

III. DEVELOPMENT GUIDELINES: The following are clarifications of RD Instruction 1924-A.

1. SCHEMATIC DRAWINGS:
The dealer-contractor shall provide a schematic floor plan, exterior wall elevations, and material description (Form RD 1924-2, or HUD and VA equivalents) for the specific model (units). The plan shall include overall dimensions to be used by the Loan Official for appraisal purposes. Detailed floor plans are not required.

2. BUILDING FOUNDATION DESIGN AND CERTIFICATION:
The dealer-contractor shall provide a site-specific foundation design and a Plan Certification Form (use Form RD 1924-25) indicating the review and acceptance by a Montana registered Architect, Engineer, or other approved residential design reviewers. The foundation support system must be designed to be site-specific, and in compliance with the current adopted edition of the International Residential Code (IRC, 2000 edition) for local wind, seismic, soil and frost conditions. The foundation design shall provide continuous, insulated perimeter enclosure walls constructed of concrete, masonry or other approved wall systems, and interior supports in sufficient capacity and location required by the manufacturer of the units. The design shall indicate method of attachment to the foundation support system in a permanent fashion to withstand lateral seismic and wind loads specified by the Code. The design shall provide appropriate moisture control, and access. The design shall also describe the support for all exterior steps, entry landings, and porches. The preparation of design documents shall be the responsiblity of the Dealer-Contractor, and will consist of a plan, wall section, and description of materials. Refer to section 7 of this document for a summary of minimum foundation construction standards and procedures. The Loan Official shall use the foundation design for the purposes of appraisal and code compliance review. The design documents shall be submitted to any Montana registered Architect, Engineer, approved residential design professional, or the local Building Official for review and certification purposes. The Loan Applicant must not be responsible for the design of the foundation to adequately support the manufactured home. No variance from these procedures shall be acceptable without consultation with RD.

3. SITE DEVELOPMENT:
A detailed site plan and site development specifications shall be provided to the Lender. While preparation may be anyone representing the Applicant, there are certain minimum features of the plan and specifications. The purpose is to graphically represent all onsite development work in size and quantity for contractual and appraisal purposes. The plan should locate property boundaries and boundary lengths. The building foundation for the manufactured home, and garage when provided, shall be located by dimensioning the front, side and rear yards. The plan shall feature, at a minimum, a driveway from the access road, leading to a paved parking pad, sidewalk, steps and landing. The plan shall indicate all utililities, including service lines and connections, and if provided, the on-site well, septic tank, and sewage disposal area. Topographic elevations for lot corners, the access road, and the ground level of the home shall be indicated on the site plan. Any other improvements, when provided, shall be shown. Material specification of garage, porch, sidewalk, and other onsite improvements shall be described in appropriate sections of the Description of Materials form (RD 1924-2, or HUD, VA equivalents). Refer to section 8 of this document for a summary of minimum site development standards. Plan review and certification is not required, other than any required permits from local building and health authorities. Lenders shall be responsible that the all of the above information is obtained.

4. CONTRACTOR CERTIFICATION STATEMENT:
The dealer-contractor shall complete the contractor certification statement provided on *Dealer-ContractorCertification Statement for New Manufactured Housing, Form MT 1924-1*. The certification statement shall be provided to the Lender for appraisal purposes and documentation of compliance with various loan conditions, including the RHS thermal requirement.

5. CONSTRUCTION CONTRACT:

The loan applicant and the Dealer-Contractor shall execute a construction contract and provide an original to the Lender prior to any loan funds are advanced for the payment of site development or the purchase of the home. The construction contract may not necessarily include the purchase of the home, but shall cover construction of the foundation and other on-site development work. When the contract amount exceeds $10,000 the form of the contract shall be the Form FmHA 1924-6 (available at any local RD office), which includes equal opportunity requirements. The contract shall clearly specify the work, the contract amount, time, and terms of payment, and reference any drawings and specifications. For proposals where the Dealer is not the foundation contractor or does not subcontract this work, the RD Loan Official shall be responsible to determine that an alternative construction contract proposal would place the design responsibility with the foundation contractor, and not leave this responsibility unaddressed. Inadequate contracts shall not be accepted by RD.

In addition to preparing the contract, referenced drawings and specifications, the Dealer-Contractor shall be responsible for providing a Builders Warranty. This warranty is in addition to any manufacturer warranty on the unit, and shall cover the repair or replacement of defects in the foundation, stitch-up of building units, and utility connections, for the period of one year after completion of the construction contract. The form of the warranty shall be Form FmHA 1924-19 (available at any local RD office). As an alternative, the Dealer-Contractor may provide an approved 10-year construction warranty.
The Lender shall be responsible for holding a preconstruction conference. The Loan Applicant/Borrower and the Dealer-Contractor are required to attend. The conference will be for the purpose of executing the construction contract and discussing procedures for starting work, partial and final payments, and construction inspections.

6. CONSTRUCTION INSPECTIONS:

The Lender shall be responsible for inspection of construction of the foundation, unit setup, and related site development work. Periodic inspections are made to assure both the Lender and the Borrower that: development work is in compliance with the terms of the construction contract, and in conformance with referenced drawings and specifications; and to assure loan funds are appropriately advanced. Three inspections are the minimum requirements. These are made at the following phases: 1st: after footings are poured, and concrete walls are formed with steel reinforcement in place; or masonry blocks are laid with steel reinforcement in place; or wood foundation framing is in place; 2nd: after the units are set upon the foundation walls, to determine the interior condition of the units; and 3rd: final completion of all contract work. In a case when the Dealer-Contractor provides a 10-year construction warranty, only the 3rd inspection is required. The Dealer-Contractor shall attend a follow-up, 11-month building warranty inspection when requested in writing by the Borrower or the Lender that identify defective conditions.
Qualified inspectors, as determined by the Lender, shall make these inspections: RHS staff for Direct loans, and FHA-approved inspectors for Guaranteed loans. The Borrower is required to attend the final inspection. Written inspection reports shall be provided to the Lender. When a local building official is also making inspections, a copy of the final occupancy permit shall be obtained by the Dealer-Contractor and provided to the Lender.

7. PERMANENT FOUNDATION:

This section provides guidance to current minimum design specifications for foundations for new manufactured housing financed or guaranteed by Rural Housing Service (RHS). The Approved Lender representing the Loan Applicant, and the Dealer-Contractor of manufactured housing responsible for the development work may use the following information as a compilation of RHS adopted standards and requirements. The International Residential Code (IRC), 2000 edition, has been adopted by the State of Montana Building Code Bureau and RHS-Montana. CABO One and Two Family Dwelling Code, 1995 edition, can be utilized until September 27, 2003. RHS-Montana has minimum property requirements set forth in CFR 7 Part 3550, and reference Exhibit J, RD Instruction 1924-A, and Exhibit B of RD Instruction 1924-C.

- **Permanent Perimeter Enclosure walls**: The manufactured home must be attached to permanent perimeter enclosure walls designed in accordance with IRC Chapter 4 for loads caused by frost heave, wind uplift, and seismic shaking as specified in ASCE 7-1988. Concrete materials shall have a minimum specified compressive strength as shown in Table R402.2 (3,500 psi at 28 days); concrete subject to weathering as indicated in Figure R301.2(3) shall be air entrained as specified in Table R402.2; total air content shall not be less that 5% or more than 7%; exterior footings shall extend to below the frost line unless otherwise protected against frost heave. Footings shall be supported on undisturbed natural soil or engineered fill in accordance with Table R403.1. Walls shall be dampproofed, and backfilled for drainage in accordance with sections R405 and R406.
- **Interior structural supports**: The structural system designed in accordance with Section R404 to transfer all loads from the manufactured home to the earth at a depth below the established frost line without exceeding the safe bearing capacity of the supporting soil. (Part A, Exhibit J, 1924-A)
- **Crawlspace Ventilation**: Ventilation opening shall be within 3 ft. of each corner, providing not less than 1 sq. ft. for each 150 sq. ft of crawl space area, or 1/1500 with vapor barrier covering ground surface (Section R408.1 and .2)
- **Crawlspace Accessway**: 18 inches by 24 inches (3 sq. ft.), and located to provide access to utility connections. (Section R408.3)

8. SITE IMPROVEMENTS:

This section provides guidance to current minimum design specifications for site improvements, other than the foundation, for new manufactured housing financed or guaranteed by Rural Housing Service (RHS). The Approved Lender representing the Loan Applicant, and the Dealer-Contractor of manufactured housing responsible for the development work may use the following information as a compilation of RHS adopted standards and requirements. RHS-Montana has minimum property requirements set forth in CFR 7 Part 1924, including Exhibit J, RD Instruction 1924-A, Exhibit B of RD Instruction 1924-C, and the adopted building standard, the International Residential Code.

A. ENTRY STRUCTURES:

- **Porches, decks, and landings**: Where provided, the exterior floor system: shall be provided with supports on at least two opposing sides by an adjoining structure and/or posts, piers, or other independent supports (definition of *Deck*, IRC section R202); shall be constructed to support safely all loads, including dead loads (section R301.1); the minimum uniformly distributed live load is 40 lb /sq ft; wood posts, poles, and columns for porch supports shall be approved naturally durable or pressure-treated wood (section R323), and resistant to termite infestation (section R324); concrete materials shall have a minimum specified compressive strength as shown in Table R402.2 (3,500 psi at 28 days); concrete subject to weathering as indicated in Figure R301.2(3) shall be air entrained as specified in Table R402.2. Total air content shall not be less that 5% or more than 7%. Exterior footings shall extend to below the frost line unless otherwise protected against frost heave. Footings shall be supported on undisturbed natural soil or engineered fill. Pier and column footing sizes shall be based on the tributary load and allowable soil pressure in accordance with (section R403). A minimum of 3 foot deep landing shall be required on each side of an egress door. (R312); the landing at the exterior doorway shall not be more than 8 inches lower than the top of the threshold, provided the door does not swing over the landing. (section R312.1.2, Exception)
- **Stairs**: Stairways shall not be less than 36 inches in clear width. (section R314.1); the maximum riser height shall be 7 3/4 inches and minimum tread depth shall be 10 inches; the greatest riser height (and tread depth) within any flight of stairs shall not exceed the smallest by more than 3/8 inch (section R314.2). Individual stair treads shall be designed for the live load or a 300-pound concentrated load acting over an area of 4 sq in, whichever produces the greater stresses (Table R301.4).
- **Guardrails**: Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guardrails not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the grade below shall have guardrails not less than 34 inches in height measured vertically from the nosing of the treads. Required guardrails on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow the passage of an object 4 inches or more in diameter (Section 316).

B. DRIVES AND WALKS:

- **Driveway:** All-weather base and surface, 6 to 12 inches in depth as needed, 10 feet wide, from street to parking pad, with maximum centerline slope of 14% and cross slope of 5%. Culvert at roadside as needed.
- **Parking pad:** One onsite hard-surfaced parking space, mimimum 4 inches in depth, on driveway base, 10 feet by 22 feet.
- **Sidewalks:** Hard-surfaced sidewalk, minimum 4 inches in depth on 4 inches of gravel base, 3 feet wide, from parking pad to entry stairs.

C. ONSITE UTILITIES:

- **Water supply:** Connection to central water system, or when not available, to individual, onsite well. Individual well must have a permit approved by the local health authority for water quality and separation distances; wells must provide minimum sustained flow of 5 gpm, as determined by test of 4-hour duration for yield and drawdown; well must be supplemented with pump and storage equipment; pump capacity to deliver adequate volume under normal operating pressures; storage capacity must be at least 42 gallons. A well must be more than 10 feet from property lines, have a 50 feet separation from septic tanks, and 100 feet separation from drainfields.
- **Hose bibb:** 2 hose bibbs, provided for separate lawn irrigation of front and rear yard areas; provided with valve inside heated or semi-conditioned area. (CABO 3408.4; note: adoption of the IRC included only Chapters 1-10)
- **Sewage disposal and sewer connections:** Connection to public wastewater system, or when not available, to onsite sewage disposal system. Onsite disposal systems shall: consist of sewer line, septic tank, and subsurface absorption field; have a permit approved by the local health authority for soil percolation and separation distances; soils at absorption field must have percolation rate of at least 1 minute per inch, and no more than 60 minutes per inch.
- **Power, Gas, and Telephone service:** Provided in accordance with local providers minimum requirements.

SITE IMPROVEMENTS (continued)

D. GRADING AND LANDSCAPING

- **Foundation backslope**: Downward slope away from the foundation must be a minimum of 6 inches in 10 feet distance (5%), and a maximum slope of 25 inches in 10 feet (21%).
- **Rough grade**: Machine or hand leveling of ground surface, free of ruts, holes, and 3-inch+ cobbles, for future addition of topsoil, if needed, and grass or ground cover, by owner.
- **Landscaping**: By owner, unless as agreed by contract.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Development

CERTIFIED BUILDING JURISDICTIONS IN MONTANA

I. PURPOSE: This exhibit lists Montana cities and county political subdivisions that the Montana Department of Labor and Industry, Building Codes Bureau has certified for construction plan review, building permit, and code enforcement purposes.

II. POLICY: Dwelling designs, including plans, specifications, and modifications, for construction of new dwellings financed by RD, shall be required to be reviewed by a qualified plan reviewer, and certified on Form 1924-25 to be in conformance with development standards designated in Montana Instruction 1924-A, section 1924.5(d). A building permit issued by those jurisdictions with full code certification may be accepted by the loan official as adequate evidence of plan certification *only* with prior written approval of waiver is obtained from the State Director. These jurisdictions are indicated with an asterisk. This exhibit may be provided by loan officials to RH loan and grant applicants for guidance in determining where local building officials are legally able to provide certification of building plans and specifications. The following list, provided by the Building Codes Bureau, is subject to revision without notice.

III. STATE CERTIFIED BUILDING JURISDICTIONS: As of 12-21-04, subject to revision.

CITY	CODES	JURISDICTION	BUILDING OFFICIAL	PHONE
Anaconda/Deer Lodge	B	Entire county	Melinda Riley	563-4018
Belgrade	B, P	City limits	Jason Karp	388-4994
Billings *	B, P, M/G, E, M	City limits	Kim Palmieri	657-8273
Bozeman *	B, P, M/G, E, M	City limits	Neil Poulsen	582-2377
Butte/Silver Bow *	B, P, E, M	County, except Walkerville	John Harrington	497-6210
Chinook	B	City limits	Bob Tilleman	357-3160
Columbia Falls *	B, P, M/G, E, M	City limits	Virgil Bench	892-4325
Conrad	B (Residential only)	City limits	Wallace Larson	271-3623
Cut Bank	B	City limits	William Bandel	873-5526
Darby	B	City limits	Dale Jankunas	821-3753
Deer Lodge	B	City limits	John Harrington	846-3649
East Helena	B, E	City limits	Peccia & Assoc/Craig Jenneskins	227-5321
Forsyth	B	City limits	Dennis Hirsch	356-2521
Fort Benton	B	City limits	Thad Axtman	622-5494
Glasgow	B, M	City limits	Jon Bengochea	228-2476
Glendive	B	City limits	George Lane	377-2361
Great Falls *	B, P, M/G, E, M	City limits	Jeff Jenkins	455-8530
Hamilton	B, P	City limits	Dale Fowler	363-3316
Hardin	B	City limits	John Kehler	665-2113
Havre	B	City limits	David Peterson	265-4941
Helena *	B, P, E, M	City limits	Brandt Salo	447-8437
Hysham	B	City limits	M. Lyle Maasch	342-5544
Kalispell *	B, P, M/G, M	City limits	Craig Kerzman	758-7730
Laurel	B, P	City limits	Steve Klotz	628-4796
Lewistown	B	City limits	Joe Niemann	538-4430
KEY: B=Building	P=Plumbing	M/G=Medical Gas	E=Electrical M=Mechanical	

III. STATE CERTIFIED BUILDING JURISDICTIONS: (continued)

CITY	CODES	JURISDICTION	BUILDING OFFICIAL	PHONE
Libby	B	City limits	John Norberg	293-2731
Livingston	B	City limits	Duncan Edwards	222-1142
Malta	B (Residential only)	City limits	John Demarais	654-1676
Manhattan *	B, P(M/G) E,M	City limits	Contact Vicki Ellison	284-3235
Miles City	B	City limits	Tim Barth	232-3493
Missoula *	B, P, M/G, E, M	City limits	Steve Hutchings	523-4632
Pinesdale	E (Residential only)	City limits	Derek Watt (Electrical inspector)	961-1271
Polson	B, M(Residential only)	City limits	Ron Melvin	883-8214
Red Lodge	B	City limits	Tim Swansborough	446-0196
Richland County	B	County, except Fairview, Sidney	Alton Hillesland	433-1122
Ronan	B	City limits	Dan Miller	676-4231
Shelby	B	City limits	James Yeagley	434-5222
Sidney	B	City limits	Alton Hillesland	433-2809
Stevensville	B (Residential only)	City limits	Bob McCormick	777-5271
Townsend	B (Residential only)	City limits	James Schauber	266-3911
Troy	B	City limits	Ron Higgins	295-5347
West Yellowstone	B, M	City limits	Bill Fogarty	646-7609
Whitefish *	B, P, M/G, E, M	City limits	Virgil Bench	863-2410
Wolf Point	B	City limits	Interstate Eng./Brian Milne	433-5617
KEY: B=Building	P=Plumbing	M/G=Medical Gas	E=Electrical M=Mechanical	

* Indicates jurisdictions with full code certification, where a building permit may be evidence of acceptable design. The plan certification requirement may be only waived in writing by the State Director.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Development

Ventilation of Residential Crawl Space Areas During Construction

I. PURPOSE: This exhibit provides guidance for RD Section 502 borrowers, home builders and subcontractors, and the Agency's Area Office staff involved with the design, construction, and monitoring of mechanically ventilated crawl space areas (see Figure 1 below) to maintain a dry environment during the construction phase. The intent is to avoid inadvertent growth of mold in the crawl space area during construction, and to be compliant with requirements of the current adopted edition of the *International Residential Code*. The requirements within this Exhibit would not apply to any loan application proposing the purchase of an existing home with a naturally ventilated crawl space.

II. POLICY: The current edition of the Agency-adopted residential construction standard, 2003 *International Residential Code*, hereinafter referred to as the Code, includes requirements for ventilation of crawl spaces in residential construction. Natural ventilation of crawl space areas has been the standard requirement of the Code with an exception allowing the crawl space to be mechanically ventilated as a conditioned space. Use of Code exceptions 4 or 5 of section R408.2 as an allowable method has resulted in mold growth under uncontrolled wet conditions during the construction phase when temporary precautions were not used to provide ventilation or reduce the moisture level within the crawl space environment. To avoid the growth of mold during construction, the resulting delay in construction, and the expense to remove visible mold spores from the crawl space, it is the policy of RD, in accordance with §1924.5(f)(1)(i)(B) of this subpart A, to require the homeowner (hereinafter referred as Applicant), and their Contractor to utilize precautions and measures outlined in this Exhibit. This Policy provides measures for maintaining a dry crawl space environment during the construction period and until the Applicant has made occupancy and is able to operate the mechanical ventilation required by the Code as an exception to natural ventilation. The policy includes contract document requirements affecting the Applicant and the Contractor responsible for constructing the home, and inspection and reporting responsibilities of the Applicant or their designated inspecting representative, and the Contractor.

III. IMPLEMENTATION PROCEDURES: RD Loan Official shall, prior to approving a construction contract and typically when discussing requirements for drawings and specifications, advise the Applicant and Contractor proposing construction of a new dwelling with a mechanically ventilated or conditioned crawl space that it is their respective and joint responsibilities to implement the following best management practices:

(a) The Applicant and/or Contractor shall provide RD a plan certification on RD Form 1924-25 issued by a professional Architect or Engineer with a current registration in the State of Montana, or by the local building official recognized by the State of Montana as the Building Authority, certifying the design of the residence complies with the Code;

(b) The Applicant and/or Contractor shall provide construction drawings and specifications, as part of their construction agreement, that include a construction note requiring the Contractor to take necessary precautions to maintain a dry crawl space environment during the construction phase; upon receiving complete construction plans and specifications from the

Applicant or Contractor, RD will determine if the dwelling design provides a conditioned crawl space with only mechanical ventilation, and if the drawings and/or specifications include adequate construction notes that provide for temporary measures to maintain dryness within the crawl area during construction. There are many variations of an acceptable construction note and while RD policy does not prescribe what it shall be, an acceptable construction note should include words to the effect that: *during the construction phase the Contractor shall be responsible to provide temporary openings in the floor or foundation wall as needed, provide temporary mechanical ventilation as needed, and maintain a dry floor deck, free of snow and rain accumulation, by whatever means are needed*; the RD Loan Official may request the assistance of the RD Architect, or other designated RD plan reviewer, to review plans and specifications and make this determination;

(c) The Applicant and Contractor shall make periodic inspections, daily or weekly as conditions warrant, of the crawl space area, for the purpose of observing the job conditions and actual construction progress during a period of time after the floor framing and decking is installed until the time when the roof structure is sheathed and "dried-in" with roofing paper;

(d) The Applicant and Contractor shall record these observations in inspection reports and communicate with all interested parties, including the RD Loan Official, the observations noted. Inspection reports should especially indicate the following: the installation of the ground cover and the opening of the crawl space accessway; the moisture condition within the crawl space area; all adverse weather conditions such as rain or snow at the job site; and any temporary deck maintainance and crawl space ventilation measures used or planned to be used to maintain dry conditions on the floor deck and within the crawl space; The RD Loan Official shall assure inspection reports during this phase of construction have been completed, and will withhold approval of partial payment requests until these reports have been provided;

(e) The Contractor shall implement appropriate actions to reduce high moisture conditions within the crawl space as needed, by installation of the polyethylene ground cover over the entire ground, by introducing adequate natural ventilation, temporary mechanical ventilation, or de-humidification until the high moisture conditions are sufficiently reduced; moisture conditions within crawl space areas may be considered excessively high when moisture droplets are observed condensed on the underside of the floor sheathing, when measurement of the interior relative humidity of this area exceeds 40%, or when the measurement of the moisture content of wood framing and floor sheathing materials exceeds 19%;

(f) when mold growth in the crawl space area is observed, the Contractor shall implement appropriate and safe actions to remove all ***visible*** mold from the wood framing and floor sheathing materials, either directly or through subcontracting of this work; safe work actions may include the use of protective clothing and breathing apparatus, maintaining adequate ventilation during the removal operation, applying a mild solution of a bleaching agent, or other safe mold-killing material, on the affected building components, removal of cleanup debris, and the removal/replacement of any building materials significantly deteriorated by moisture or mold, in a safe manner to prevent the spread of mold to other areas of the construction; this may include the use of HEPA-filtered vacuum equipment;

(g) when significant surface areas of the crawl space construction have been affected by mold, and after removal of ***visible*** mold is complete, the Contractor shall take all necessary steps to contract for an independent post-remediation inspection of the crawl space areas; when a post-remdiation inspection and test is needed, the services will be conducted by an inspector experienced in taking mold samples and independent of the mold remediation subcontractor, for the purposes of making observations, testing, submitting samples to a licensed laboratory, and documenting the results in a written report, all in accordance with industry standards for mold inspection and testing, on the laboratory's business letterhead; the inspection provider shall be responsible to submit copies to the Applicant, the Contractor, and the RD Loan Official; the inspection service provider's report shall indicate either the crawlspace is free of visible mold or contains surfaces with mold that could be significant to the health of the dwelling's occupants.

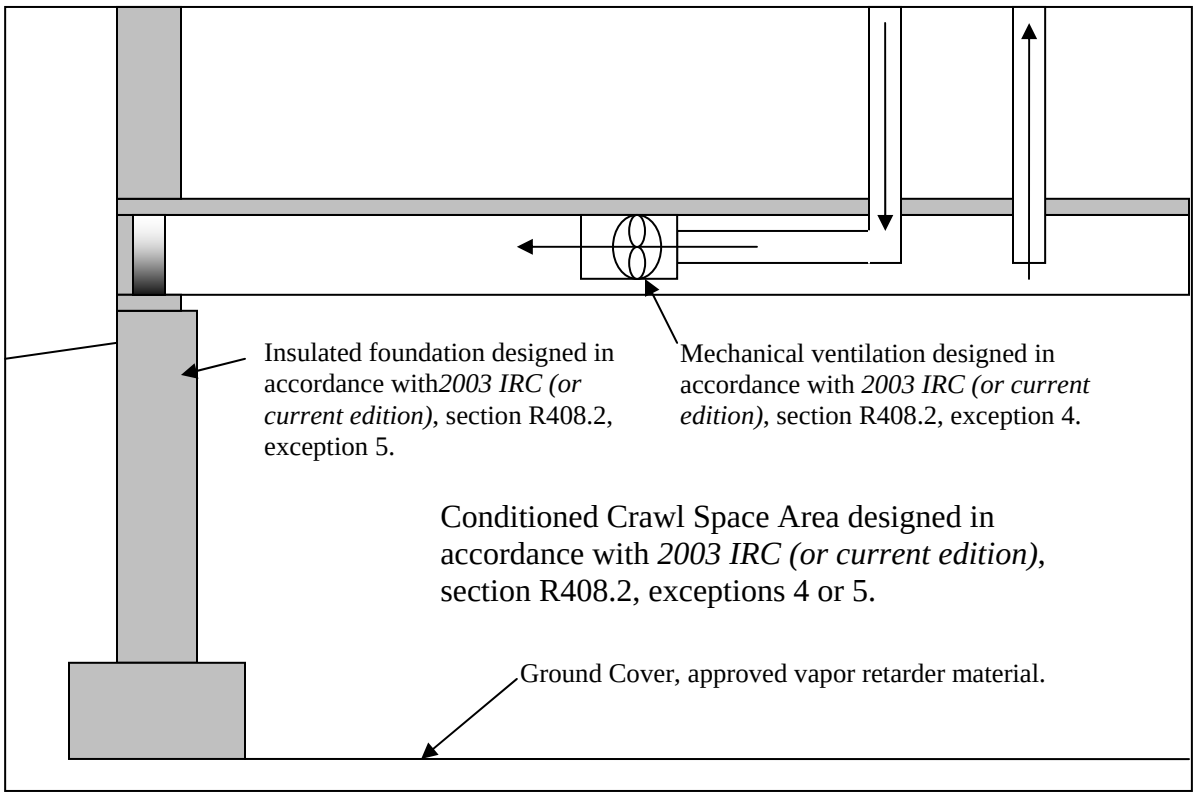

Figure 1. Illustration of a Conditioned Crawl Space area without natural ventilation.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Development

CHECKLIST FOR NEW DWELLING DESIGNS

A. SITE PLAN* Note: Recommended scale is 1" = 20'.

_____ 1. Lot and block number; address, including street, city, and county.
_____ 2. Property (boundary) lines with dimensions.
_____ 3. Front, rear, and side yard dimensions from dwelling to property lines.
_____ 4. Garages and other building dimensions.
_____ 5. Walkway, driveway, parking pad, steps, and porch dimensions.
_____ 6. Building setbacks, and easements.
_____ 7. Grades/elevations: Main floor, garage, street (curb/crown), lot corners, swales.
_____ 8. Utility lines: water, sewer, electrical service lines (telephone, gas, when provided).
_____ 9. Onsite well, septic tank, and septic drainfield locations and sizes.

B. FLOOR PLANS Note: Recommended scale is 1/4" = 1' - 0"; B3 may be combined with D2, and B4-6 combined with B1; provide B2a or B2b, as appropriate.

_____ 1. ***1st floor**: Walls, door and window sizes, cabinets, closet shelving, accessways.
_____ 2a. ***Foundation plan**: Walls, all interior structural members, vents, accessway.
_____ b. ***Basement plan**: Walls, windows, stairway, interior structural members, all improvements.
_____ 3. Framing layout for floor joists and roof trusses; include size and spacing.
_____ 4. Heat/Vent systems: Room supply/return or baseboard heaters; furnace; exhaust fan.
_____ 5. Plumbing fixtures (include hwh, clothes washer supply, floor drain, hose bibbs).
_____ 6. Electrical layout: all fixtures, switches, outlets, and circuit panelboard.

C. EXTERIOR WALL ELEVATIONS Note: Recommended scale is 1/8" = 1' - 0".

_____ 1. ***Front**: Doors, windows, gutters, downspouts, steps, porches, finish materials, floor line, exterior finish grade, and bottom of footing.
_____ 2. Rear: Same as front.
_____ 3. Sides: Same as front; one side, except second sidewall elevation required for attached garage.

D. SECTIONS, DETAILS, AND SCHEDULES Note: D1 may be combined with D2.

_____ 1. ***Foundation wall sections**: Exterior wall, insulation, interior structural members.
_____ 2. Building section: Describe all building materials from footing to roof framing.
_____ 3. ***Stairway section**: Riser, tread, stringer, ceiling, handrail, and landings.
_____ 4. Cabinet elevations: Base and wall; show shelving, drawers and doors.
_____ 5. Window and door schedule: May be combined with floor plan, B1.

E. DESCRIPTION OF MATERIALS* Note: Use FmHA Form 1924-2 or similar HUD form.

F. CERTIFICATIONS Note: F2 and F7 are required only for manufactured homes.

_____ 1. Plan certification: FmHA Form 1924-25 signed by local building official, Montana registered architect, or engineer; for structural, seismic, and thermal design of home; include telephone #.
_____ 2. ***Foundation design certification**: See F1; for structural and seismic design of foundations.
_____ 3. ***Manufactured Home certification**: Federal Manufactured Home Construction and Safety Standard certification plate is typically located on exterior endwall.
_____ 4. Manufactured roof truss: Truss configuration, bearing data, and engineer's seal.
_____ 5. ***Building permit**: Only within building jurisdictions certified by State Building Codes Bureau.
_____ 6. ***Onsite Well/Sewage Treatment Permits**: Permits from the local health authority.
_____ 7. ***Manufactured Housing Thermal Performance Certification**: HUD Sticker, Zone 3.

*** Indicate items also required for manufactured homes.**